REMARKS/ARGUMENTS

The Office Action mailed February 20, 2004 has been reviewed and carefully considered. Claims 1-12 are pending in this application, with claims 1 and 8 being the only independent claims. Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested.

In the Office Action mailed February 20, 2004, claims 1, 2, and 5-11 stand rejected under 35 U.S.C. §103 as anticipated by U.S. Patent No. 6,505,241 (Pitts) in view of U.S. Patent No. 6,226,752 (Gupta).

Claims 3 and 12 stand rejected under 35 U.S.C. §103 as unpatentable over Pitts and Gupta in further view of U.S. Patent No. 6,343,323 (Kalpio).

Claim 4 stands rejected under 35 U.S.C. §103 as unpatentable over Pitts and Gupta in further view of U.S. Patent No. 6,457,060 (Martin).

Before discussing the cited prior art and the Examiner's rejections of the claims in view of that art, a brief summary of the present invention is appropriate. The present invention is directed to a system and method for effective use of an air link between mobile stations and gateway servers. More specifically, the present invention relates to a system and method for minimizing usage of radio resources while a mobile station is communicating with a web server and the content or resource specified by the user has been moved to a different location. When this situation arises, a redirection message is generated at the web server and sent to the mobile station which includes the new location of the content and/or resource. In the present application, the necessary tasks associated with redirection messages are handled by a gateway server (page 5, lines 5-21 of the present application). According to the present invention, a mobile station transmits a request for content and/or resource to a gateway server. The gateway server then

transmits the request to the web server. If the requested content and/or resource has moved to a new location, the web server returns a redirection message to the gateway server. The gateway server transmits another request for the content and/or resource to the new location without communicating the redirection message to the mobile station. After receiving the requested content and/or resource, the gateway server transmits the requested content and/or resource to the mobile station. The processing of the redirection messages by the gateway server is transparent to the mobile station so that the mobile station receives the requested content and/or resource without sending another request to a webserver. The present invention minimizes the communications over the air between the requesting mobile client and the gateway server.

Each of the independent claims 1 and 8 recite (1) receiving a redirection message by the gateway server from the web server, the redirection message indicating a new location of the at least one of content and resource, and (2) creating and transmitting by the gateway server to one of the web server and another web server another request for the at least one of content and resource at the new location without communicating the received redirection message to the mobile station. Accordingly, the gateway server according to the present invention does not send the redirection message back to the mobile client over the air link.

Pitts discloses a network including nodes with caching capabilities. When a request for data in a destination node is made, the request is transmitted along a chain of nodes to the destination location. The requested data may be provided by an intermediate node if the intermediate node has cached the requested data. The advantage is that the request for data does not have to be sent all the way to the destination node if the intermediate node has the requested data.

According to Pitts, a digital computer network includes a Network Distributed Cache (NDC) server site 22, an NDC client site 24, and a plurality of intermediate NDC sites 26A,

26B (col. 9, lines 40-43 of Pitts). The NDC server site 22 includes a hard disk 32 storing data that may be accessed by the client site 24 (col. 9, lines 46-47). A client workstation 42 communicates with the NDC client 24 by an Ethernet Local Area Network (LAN) using a network protocol (col. 9, lines 50-53). Each of the NDC sites 22, 24, 26A, 26B includes an NDC 50 with a computer program and a data cache (col. 9, lines 54-59). The NDCs 50 are interconnected by Data Transfer Protocol (DTP) messages 52 to provide a data communication network by which the client workstation may access data on the hard disk 32 (col. 9, lines 60-64). The series of NDC sites 22, 24, 26A, 26B linked by DTP messages 52 form a chain connecting the client workstation 42 to the NDC server site 22 (col. 10, lines 44-46). Any node in a network of processors that has sufficient surplus RAM may be configured as an NDC site (col. 10, lines 39-41).

An object of Pitts is to provide a generalized data caching mechanism capable of projecting multiple images of a data structure from its source into sites that are widely distributed across a network (col. 6, lines 38-41). As described at col. 11 line 7 to col. 12, line 5, a request for data on a hard disk made by a client workstation is received at the client site 24 which is the first node of the NDC chain between the work station 42 and the server site 22. The cache of the client site 24 is checked to see if the requested information is stored there. If the information is there, the information is returned to the client workstation. If the information is not there, the request is sent further downstream on the NDC chain toward the hard disk. If none of the sites on the NDC chain have the information in cache, then the hard disk itself is accessed to get the information.

Pitts fails to disclose, teach or suggest the steps of (1) receiving a redirection message by the gateway server from the web server, the redirection message indicating a new location of the at least one of content and resource, and (2) creating and transmitting by the gateway server to one of the web server and another web server another request for the at least

one of content and resource at the new location without communicating the received redirection message to the mobile station. In Pitts, the request for information in Pitts travels downstream to the hard disk along the chain of NDC sites between the client workstation 42 and the NDC server site 22 (see col. 10, lines 44-47). If the information is found at one of the sites in the NDC chain, the information is sent upstream to the client (see col. 11, lines 2-6). Therefore, Pitts does not redirect the request if the information requested is not found at one of the sites. Rather, the request is sent one further step downstream toward the source of the information. Pitts does not state what to do if the information is not found on the hard disk. Accordingly, Pitts fails to teach or suggest receiving a redirection message and creating and transmitting another request to the new location, without communicating to the station which requested the information, as expressly recited in independent claims 1 and 8.

The Examiner states that the receipt of a redirection message is disclosed in col. 11, lines 45-60 of Pitts because the servers are checked one at a time to determine which server has the information in cache. As noted above, the checking of the cache at each site and the sending of the request downstream to the next site along the chain of NDC sites between the client workstation 42 and the NDC server site 22 does not constitute a redirection message. Rather, the original site of the information, i.e., the hard disk, remains the same and the request is forwarded downstream toward the original information. The request does not change its original direction.

The Examiner further states that col. 11, lines 45-60 and arrows 54, 56 in Fig. 1 discloses the step of creating and transmitting by the gateway server to one of the web server and another web server another request for the at least one of content and resource at the new location in response to the redirection message and without communicating the redirection message to the station. The Examiner states that the arrows show the pathway of the redirection message and

shows that they do not travel back to the station. The arrows 54 and 56 are merely used to disclose the directions downstream 54 and upstream 56 of a chain of NDC sites between a client workstation 42 and NDC server site 22 (see col. 10, lines 44-65). They do not show where the data flow starts or stops.

Gupta fails to teach or suggest what Pitts lacks. Gupta discloses a method an apparatus for authenticating users wherein requests may be sent over wireless networks. However, Gupta fails to teach or suggest redirecting a message, as expressly recited in independent claims 1 and 8.

In view of the above remarks, independent claims 1 and 8 are allowable over Pitts in view of Gupta.

Dependent claims 2-7 and 9-12, each being dependent on one of independent claims 1 and 8, are deemed allowable for the same reasons expressed above with respect to independent claims 1 and 8.

The application is now deemed to be in condition for allowance and notice to that effect is solicited.

Respectfully submitted,

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